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WATER SUPPLY OUTLOOK FOR OREGON



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

**OREGON STATE UNIVERSITY and STATE ENGINEER
of OREGON**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
MAR. 1, 1974

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: Snow Surveyors near Ship Creek,
Alaska snow course.*

S. S. PHOTO A-272-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

MARCH 8, 1974

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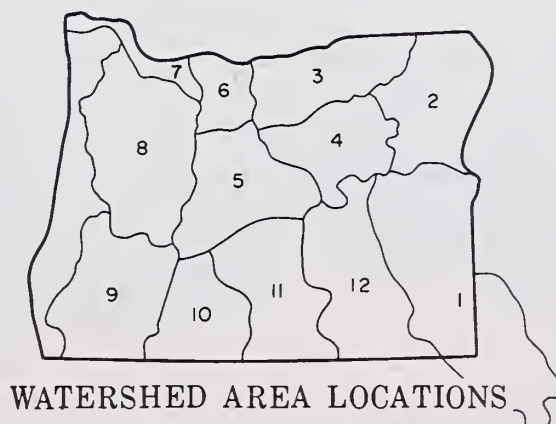
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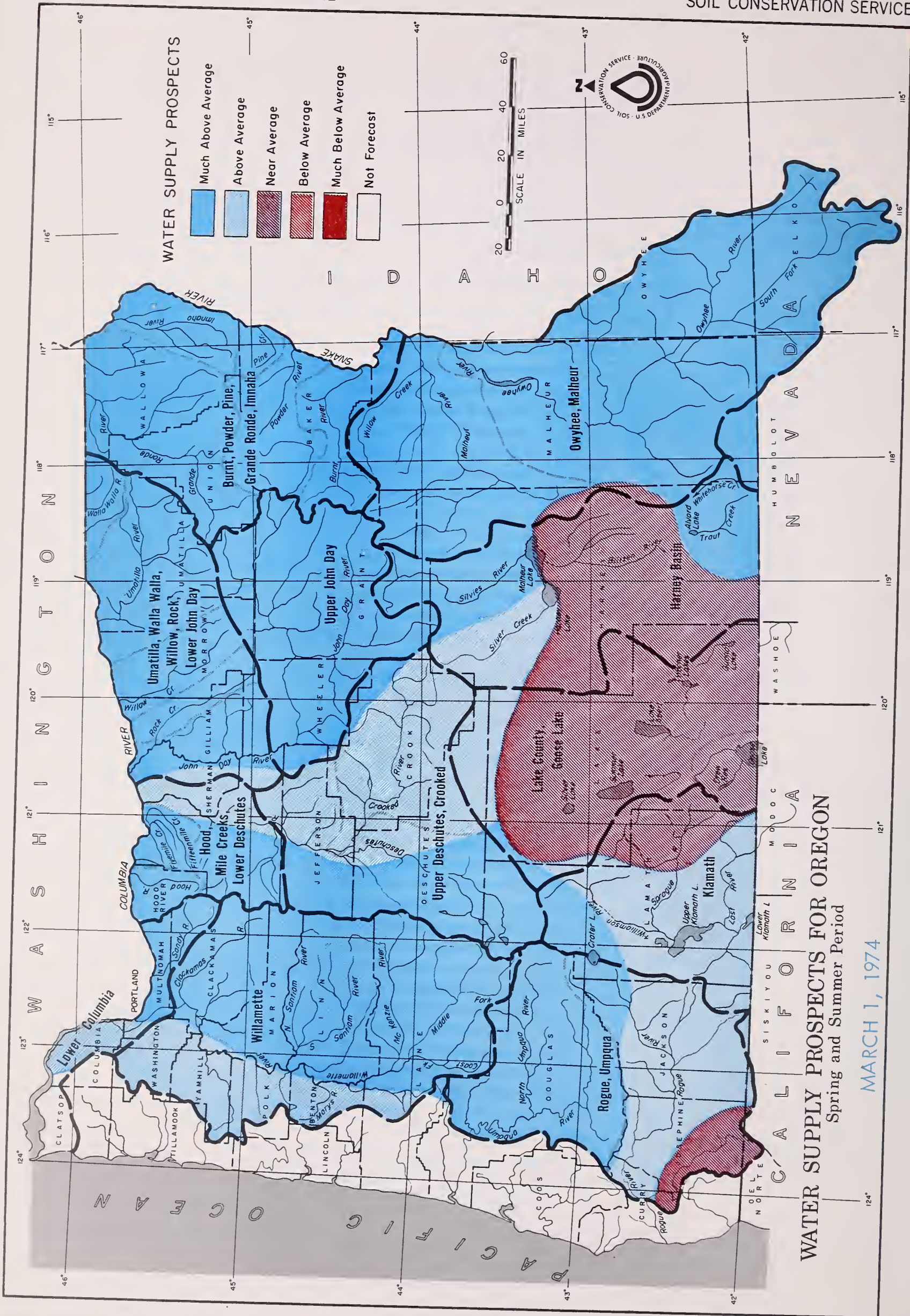
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WATER SUPPLY OUTLOOK for OREGON

MARCH 1, 1974

A near record snowpack means excellent water supplies for most Oregon water users for 1974. The mountain snowpack ranges from 200-220% of average in the north and northeastern parts of the state down to near normal in Lake and Harney Counties. Reservoir storage is above normal for this time of year.

SNOW COVER

A lowered freezing level and good precipitation in most mountainous areas brought more than normal amounts of snow during February. Low elevation snow courses are now reporting near average snow cover. The snowpack is the second highest on record for March 1 at a number of snow courses. The snow cover is exceptionally heavy in the Mt. Hood area and in the Blue Mountains above Pendleton. It is much above normal in all areas except in Lake and Harney Counties where it is near average.

PRECIPITATION

Precipitation during the winter period, November through February, has been above to much above average in all areas of the state. During the month of February precipitation was near average in most locations, except along the west side of the Cascades where it was 130-135% of normal and in the southeastern corner of the state where it was below normal.

RESERVOIR STORAGE

Reservoir storage is above average. Twenty-six major irrigation reservoirs are storing 2,345,000 acre feet of water. This is 116% of normal. Most reservoirs should fill.

STREAMFLOW

Streamflow this past month dropped off from the heavy flows experienced early in the year. This was due mostly to the cooler temperatures. Spring and summer streamflow volumes are forecast to be near average in south-central Oregon and above to much above average elsewhere in the state.

WATER SUPPLY OUTLOOK

OWYHEE, MALHEUR WATERSHEDS

OREGON

as of

MARCH 1, 1974

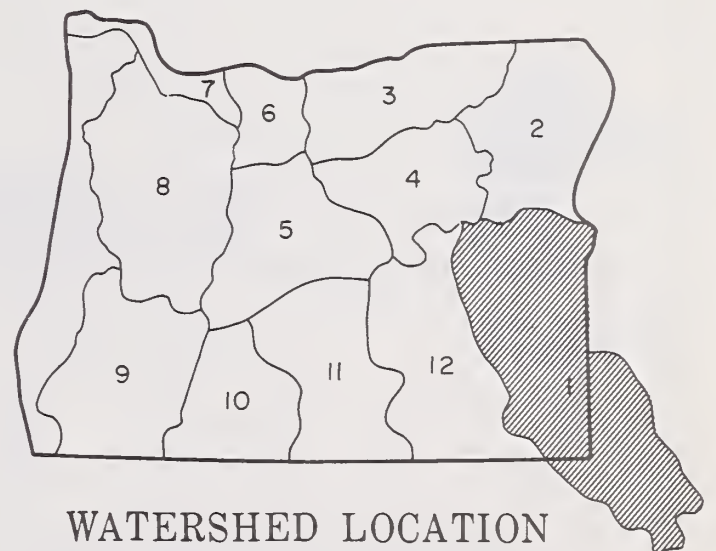
GENERAL OUTLOOK

ABOVE AVERAGE WATER SUPPLIES ARE FORECAST FOR WATER USERS IN MALHEUR COUNTY. THE SNOWPACK IS CURRENTLY 140-155% OF NORMAL. DESPITE LOW FEBRUARY PRECIPITATION, RESERVOIR STORAGE AND SOIL MOISTURE REMAIN HIGH, AND EXCELLENT SPRING AND SUMMER STREAMFLOWS ARE ANTICIPATED.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Boulder Creek	Excellent	Excellent
Bully Creek	Average	Average
Cow Creek	Average	Average
Jordan Creek	Excellent	Average
Jordan Valley Irrig. Dist.	Excellent	Average
McDermitt Creek	Average	Average
Oregon Canyon Creek	Average	Average
Owyhee Project	Excellent	Excellent
Succor Creek	Average	Average
Tenmile Creek	Average	Average
Vale-Oregon Irrig. Dist.	Average	Average
Warmsprings Irrig. Dist.	Average	Average
Willow Creek (Reservoired)	Excellent	Average



U.S.D.A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

Report prepared by
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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Bully Creek at Warm Springs	17.0	126	March-May		13.5 ^m
Malheur near Drewsey	142	150	March-July		94
	109	150	April-Sept.		72
Malheur, North Fork at Beulah	104	145	March-July		72
	87	136	April-Sept.		64
Owyhee Reservoir net Inflow ^m	647	150	March-July	341	431
	498	150	April-Sept.	270	332

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000	June 20	May 24
	250	July 8	June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average
Antelope	70.0	19.2	4.5	16.7 ^m
Beulah Reservoir	60.0	49.3	34.8	30.8
Bully Creek	30.0	20.4	14.5	15.6 ^m
Owyhee	715.0	536.5	603.4	451.2
Warm Springs	191.0	84.3	111.2	96.5

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Malheur River	2	140	113
Owyhee River	4	106	93

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Jordan Creek	3	200	140
Malheur River	5	170	145
Owyhee River	5	160	155

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE,
IMNAHA WATERSHEDS

OREGON

as of

MARCH 1, 1974

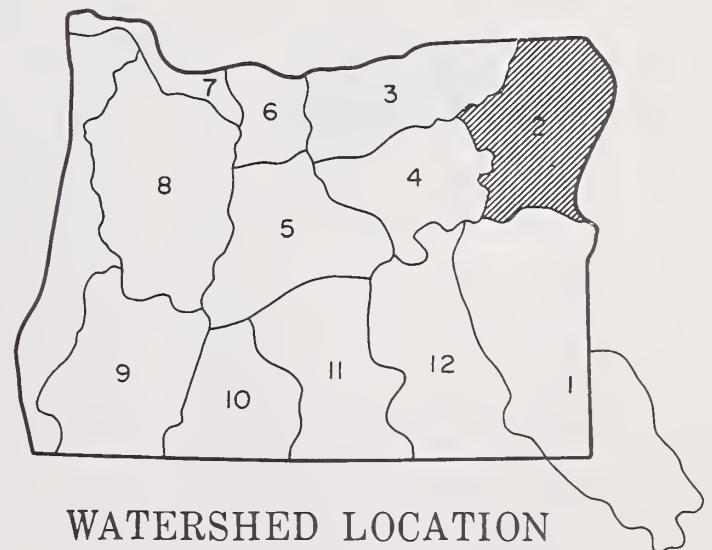
GENERAL OUTLOOK

AN EXCELLENT WATER SUPPLY IS FORECAST FOR THIS AREA. STREAMFLOW VOLUMES ARE EXPECTED TO RANGE FROM 125% TO 180% OF NORMAL DURING THE SPRING AND SUMMER MONTHS. SNOWPACK IS OVER 1 1/2 TIMES NORMAL THROUGHOUT THE AREA. ALTHOUGH THE FEBRUARY PRECIPITATION WAS ONLY EIGHTY-NINE PERCENT OF AVERAGE, SOIL MOISTURE AND RESERVOIR STORAGE ARE NEAR NORMAL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Alder Slope	Excellent	Excellent
Baker Valley	Excellent	Excellent
Big Creek	Excellent	Excellent
Clover Cr. (nr. N. Powder)	Excellent	Excellent
Cove	Excellent	Excellent
Durkee	Excellent	Excellent
Eagle Valley	Excellent	Excellent
Elgin	Excellent	Excellent
Enterprise-Joseph	Excellent	Excellent
Hereford-Bridgeport	Excellent	Excellent
Imnaha River	Excellent	Excellent
LaGrande-Island City	Excellent	Excellent
Lostine-Wallowa	Excellent	Excellent
No. Powder River-Wolf Creek	Excellent	Excellent
Pine Valley	Excellent	Excellent
Powder River-Elk Creek	Excellent	Excellent
Summerville	Excellent	Excellent
Sumpter Valley	Excellent	Excellent
Union-Hot Lake	Excellent	Excellent
Unity	Excellent	Excellent



WATERSHED LOCATION

U.S.D.A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average	FORECAST PERIOD	Last Year Average i
Bear near Wallowa	81	124	April-Sept.	66
Burnt near Hereford ^d	68	162	March-July	42
	58	176	April-Sept.	33
Catherine near Union	80	124	April-Sept.	65
Eagle Creek abv. Skull Creek	249	142	April-July	175
	270	142	April-Sept.	190
Grande Ronde at La Grande	309	160	March-July	193
	261	165	April-Sept.	158
Hurricane near Joseph	58	124	April-Sept.	47
Imnaha at Imnaha	444	145	April-Sept.	307
Lostine near Lostine	154	123	April-Sept.	125
Powder near Sumpter ^d	80	145	April-July	55
	82	146	April-Sept.	56
Wallowa, East Fork near Joseph ^d	16.0	131	March-Sept.	12.2
	15.2	133	April-Sept.	11.4

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
Phillips Lake	73.5	35.2	46.5	- -
Thief Valley	17.4	17.4	17.4	17.3 ^m
Unity	25.2	15.4	12.8	14.0
Wallowa Lake	37.5	16.3	14.6	22.3

SUMMARY of SNOW MEASUREMENTS
(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
Burnt River	4	225	155
Grande Ronde River			
above La Grande	4	355	170
Powder River	5	195	150
Wallowa, Imnaha, Catherine Creek	6	205	155

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average i
Burnt, Powder	2	149	129
Grande Ronde, Catherine Creek, Imnaha River	3	114	107

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK,
LOWER JOHN DAY WATERSHEDS

OREGON

as of

MARCH 1, 1974

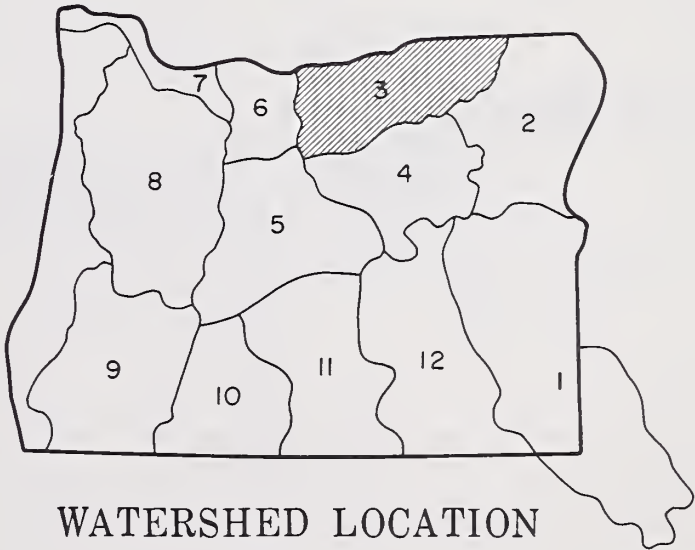
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR ALL AREAS OF GILLIAM, MORROW, AND UMATILLA COUNTIES. NEARLY TWICE THE NORMAL SNOWPACK HAS BEEN MEASURED IN THE MOUNTAINS THIS MONTH, WHICH SHOULD INSURE THE FILLING OF ALL MAJOR RESERVOIRS IN THE AREA. PRECIPITATION FOR THE MONTH OF FEBRUARY WAS 110% OF AVERAGE WHICH HELPED MAINTAIN THE NORMAL SOIL MOISTURE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Walla Walla River, No. Fork	Excellent	Average
Walla Walla River, So. Fork	Excellent	Average
Walla Walla River, Main	Excellent	Average
Walla Walla River, Little	Excellent	Average
Couse Creek	Excellent	Average
Dry Creek	Excellent	Average
Pine Creek	Excellent	Average
Umatilla River, Main	Excellent	Average
Wildhorse Creek	Excellent	Average
Umatilla R. (Cold Springs Reservoir)	Average	Average
Umatilla R. (McKay Res.)	Excellent	Excellent
McKay Creek	Excellent	Excellent
Birch Creek	Excellent	Average
Butter Creek	Excellent	Average
Willow Creek	Excellent	Average
Rhea Creek	Excellent	Average
Rock Creek (John Day Tributary)	Excellent	Average



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Birch Creek at Rieth	27	123	March-July		22
	20.5	129	April-Sept.		15.9
Butter Creek near Pine City	17.0	149	March-July		11.4
McKay near Pilot Rock	34	140	April-July		24
	35	143	April-Sept.		24
Umatilla near Gibbon	138	143	March-Sept.		97
	112	148	April-Sept.		75
Umatilla at Pendleton	290	145	March-Sept.		200
	216	150	April-Sept.		144
Walla Walla, South Fork near Milton	95	120	March-Sept.		79
	85	129	April-Sept.		66

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	June 17	May 22

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
Cold Springs	50.0	39.1	34.4	41.4
McKay	73.8	60.5	22.6	40.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average i
Umatilla, Walla Walla, McKay Creek	3	111	96

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
McKay Creek	3	390	185
Umatilla River	3	470	220
Walla Walla River	2	420	215

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
UPPER JOHN DAY WATERSHEDS
OREGON

as of
MARCH 1, 1974

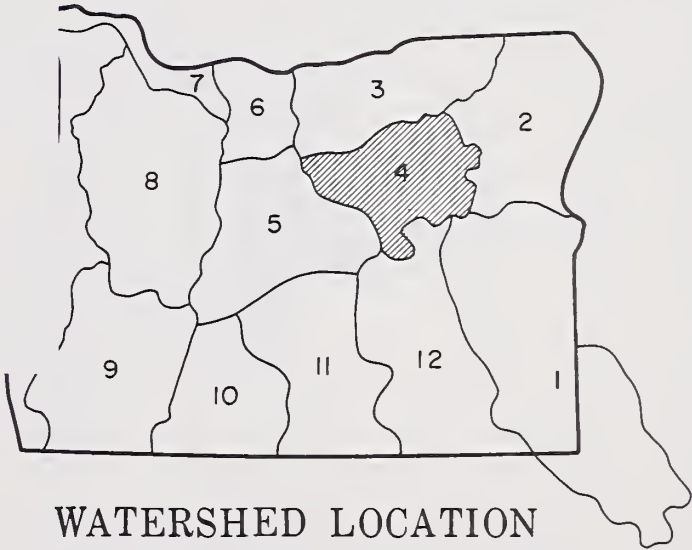
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK FOR MOST OF THE UPPER JOHN DAY WATERSHEDS IS EXCELLENT. THE MOUNTAIN SNOWPACK VARIES FROM NEAR AVERAGE TO 165% OF AVERAGE. FEBRUARY PRECIPITATION WAS 110% OF NORMAL WITH A COMBINED NOVEMBER-FEBRUARY WINTER PERIOD OF 160% OF NORMAL. THE SOIL MOISTURE CONDITIONS REMAIN ABOVE AVERAGE AND GOOD SPRING AND SUMMER STREAMFLOWS ARE ANTICIPATED.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Beech Creek	Excellent	Average
Beech Creek-Fox-Long Cr.	Excellent	Average
Bridge-Mountain Creeks	Excellent	Average
Camas Creek	Average	Average
Cherry Creek	Average	Average
Indian-Pine Creeks	Excellent	Average
John Day River, Main Fork	Excellent	Average
John Day River, Mid. Fork	Excellent	Average
John Day River, N. Fork	Excellent	Average
John Day River, S. Fork	Excellent	Average
Monument-Kimberly	Excellent	Average
Strawberry Creek	Excellent	Average



WATERSHED LOCATION

U.S.D.A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Camas Creek near Ukiah	59	138	March-July		43
	46	138	April-Sept.		33
John Day, Middle Fork at Ritter	193	150	March-July		129
	165	152	April-Sept.		108
John Day, North Fork at Monument	1056	164	March-July		646
	890	165	April-Sept.		540
Strawberry near Prairie City	9.3	130	March-July		7.2
	9.4	124	April-Sept.		7.6

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
John Day above Dayville	5	138	121
John Day, North Fork	2	128	117

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
John Day, North Fork	7	220	140
John Day abv. Dayville	5	185	140

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j). Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

UPPER DESCHUTES, CROOKED WATERSHEDS

OREGON

as of

MARCH 1, 1974

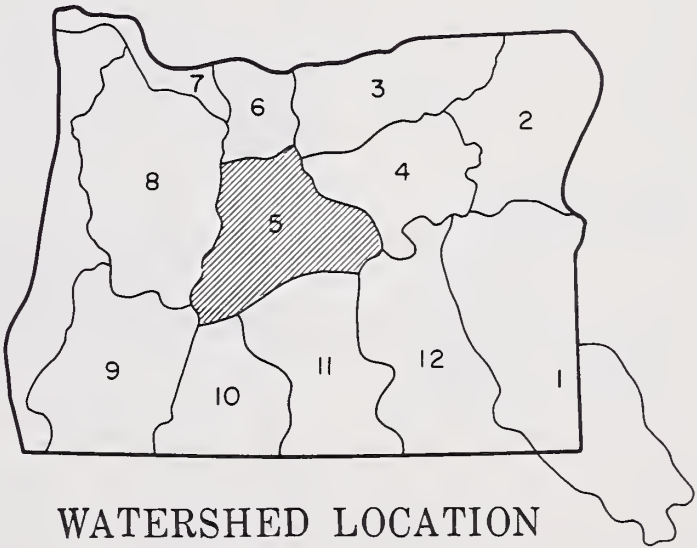
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE IN PROSPECT FOR MOST OF THE UPPER DESCHUTES, CROOKED RIVER WATERSHEDS DURING THE SPRING AND SUMMER OF 1974. THE SNOWPACK VARIES FROM 130% TO 160% OF NORMAL. PRECIPITATION DURING FEBRUARY WAS ONLY 90% OF AVERAGE, BUT SOIL MOISTURE REMAINS HIGH. EXCELLENT STREAMFLOWS ARE FORECAST AND MOST RESERVOIRS ARE EXPECTED TO FILL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Arnold Irrigation Dist.	Excellent	Average
Bear Creek	Average	Average
Beaver Creek	Average	Average
Camp Creek	Average	Average
Central Ore. Irrig. Dist.	Excellent	Average
Crooked River	Average	Average
Deschutes River	Excellent	Excellent
Hay-Trout Creeks	Average	Average
Lone Pine Irrig. Dist.	Excellent	Excellent
Mill Creek	Average	Average
North Unit Irrig. Dist.	Average	Average
Ochoco Creek	Excellent	Average
Sisters Irrigation Dist.	Excellent	Excellent
Snow Creek Irrig. Dist.	Excellent	Excellent
Squaw Creek Irrig. Dist.	Excellent	Excellent
Swalley Ditch	Excellent	Excellent
Tumalo Project	Excellent	Average
Walker Basin Irrig. Dist.	Excellent	Average



U.S.D.A. SOIL CONSERVATION SERVICE

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STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Beaver Creek near Paulina	42	143	March-July		29
	27	169	April-Sept.		16.0
Crane Prairie Reservoir total Inflow	176	148	April-Sept.		119
Crescent at Crescent Lake ^d	31	148	March-July		21
	33	150	April-Sept.		22
Crooked near Post ^d	165	122	March-July		135
	121	132	April-Sept.		91
Deschutes at Benham Falls ^d	431	120	April-July		360
	630	115	April-Sept.		550
Deschutes below Snow Creek	108	156	March-Sept.		69
	101	163	April-Sept.		62
Deschutes, Little near La Pine ^d	148	170	March-July	38	87
	123	150	April-Sept.	36	82
Ochoco Reservoir net Inflow ^d	38	140	March-July		27
	26	140	April-Sept.		18.8
Odell near Crescent	36	132	April-Sept.		28
Squaw near Sisters	62	124	April-Sept.	33	50
Tumalo near Bend ^d	55	125	April-Sept.		44

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	300	*	July 15
Crooked R. near Post	100	June 7	June 1
Deschutes at Bend	1500	*	July 1
Little Deschutes near La Pine	400	June 19	June 7
	200	July 24	July 8
*Issued on April 1.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <i>i</i>
Crane Prairie	55.3	39.8	54.1	43.4
Crescent Lake	86.9	79.9	85.4	48.3
Ochoco	47.5	36.8	27.3	25.6
Prineville	153.0	102.5	112.5	112.4 ^m
Wickiup	200.0	161.1	187.1	168.7

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <i>i</i>
Crooked R., Upper Deschutes River	2	124	109

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <i>i</i>
Crooked, Ochoco	4	185	130
Deschutes abv. Wickiup	3	245	145
Little Deschutes	4	265	160
Tumalo & Squaw Crs.	3	270	140

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES

WATERSHEDS

OREGON

as of

MARCH 1, 1974

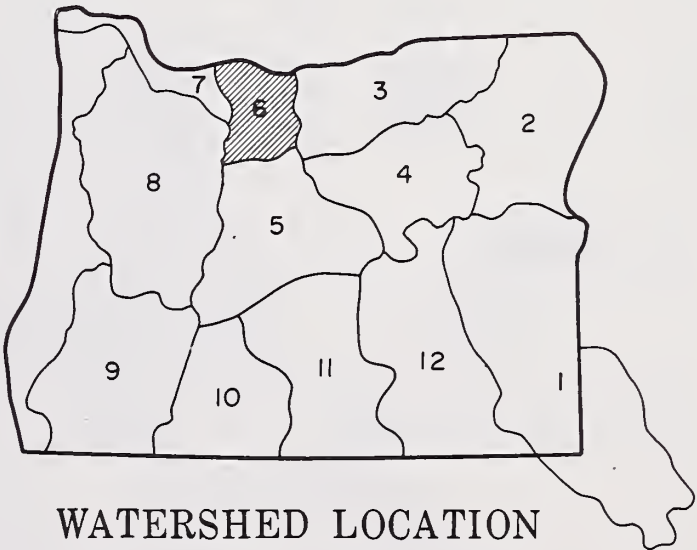
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR THE HOOD RIVER WATERSHEDS. A RECORD TO NEAR RECORD SNOWPACK HAS BEEN MEASURED THROUGHOUT THE AREA. PRECIPITATION DURING FEBRUARY WAS 105% OF NORMAL AND AVERAGED 150% FOR THE NOVEMBER-FEBRUARY WINTER PERIOD. WASCO RESERVOIR CONTAINED 142% OF AVERAGE STORAGE FOR MARCH 1.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Aldridge Ditch (Tony Creek)	Excellent	Excellent
Badger Creek	Excellent	Excellent
Dee Irrigation Dist.	Excellent	Excellent
East Fork Irrig. Dist	Excellent	Excellent
Farmers Irrigation Dist.	Excellent	Excellent
Hood River Irrig. Dist	Excellent	Excellent
Juniper Flat	Excellent	Excellent
Middle Fork Irrig. Dist.	Excellent	Excellent
Mile Creeks	Excellent	Excellent
Mill Creek	Excellent	Excellent
Mount Hood Irrig. Dist.	Excellent	Excellent
Rock-Gate-Threemile Crs.	Excellent	Excellent
Tygh Creek	Excellent	Excellent
White River	Excellent	Excellent



WATERSHED LOCATION

U.S.D.A. SOIL CONSERVATION SERVICE

OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Hood River near Tucker Bridge	386	135	April-July		286
	452	136	April-Sept.		332
Hood, West Fork near Dee	175	132	April-July		132
	206	134	April-Sept.		154
White below Tygh Valley	217	184	April-July		118
	245	184	April-Sept.		133

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	50*	July 15-31	39**
*Average cfs forecast to flow for this two-week period.			
**Average cfs for period of record.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Clear Lake (Wasco)	11.9	4.4	7.3	3.1

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Hood River, Mile Creeks	1	100	-

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Hood River	5	445	200
Mile Creeks	3	290	155
White River	3	450	200

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

LOWER COLUMBIA WATERSHEDS

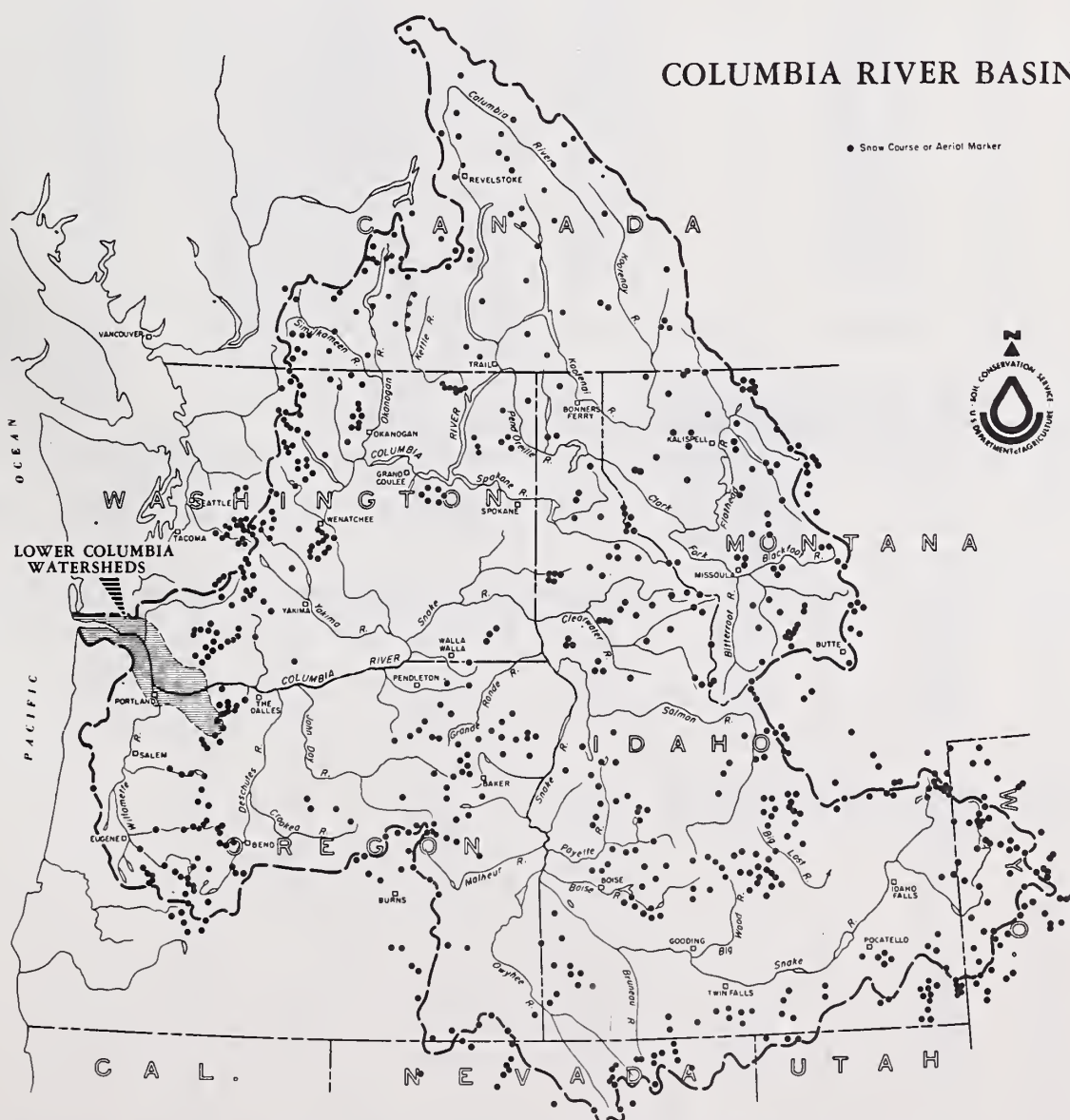
OREGON

as of

MARCH 1, 1974

GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IS EXCELLENT THROUGHOUT MOST OF THE COLUMBIA BASIN. THE CURRENT SNOWPACK RANGES FROM 130% TO OVER TWICE THE NORMAL AMOUNT FOR MARCH FIRST. RESERVOIR STORAGE IS ABOVE AVERAGE EXCEPT FOR FLOOD CONTROL RESERVOIRS WHICH ARE EXPECTED TO FILL. WATER SUPPLIES SHOULD BE ABUNDANT FOR THE ENTIRE SEASON.



U.S.D.A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

Report prepared by

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PORTLAND, OREGON 97205

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Sandy River	2	430	200

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Columbia at The Dalles ^d	87,060	119	April-June	43,211	73,160
Sandy River near Marmot	127,400	122	April-Sept.	65,012	104,426
	454	133	April-July		342
	509	128	April-Sept.		398

*1953-67 Average.

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW ^d (1,000 A.F.)			PEAK ^e (1,000 c.f.s.)	DATE
	APR.— SEPT.	APR.— JUNE	MAY— JUNE		
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1953-67 Avg.	105,181	72,408	59,689	574	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s.)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

WATER SUPPLY OUTLOOK

WILLAMETTE WATERSHEDS

OREGON

Area 8

as of
MARCH 1, 1974

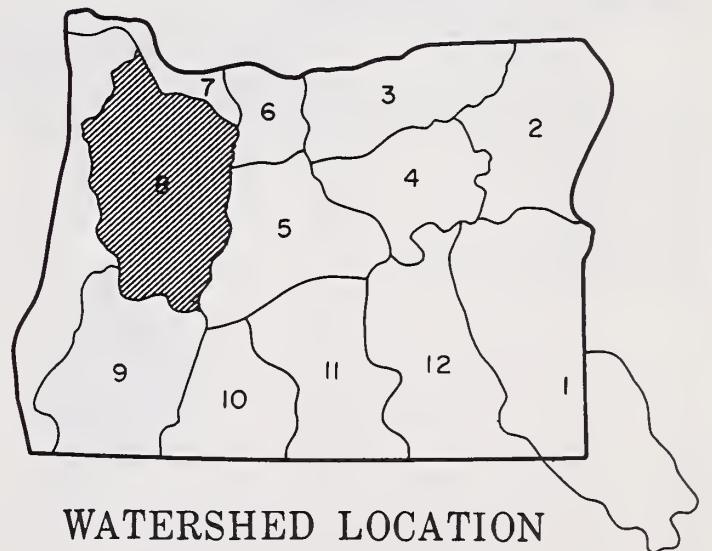
GENERAL OUTLOOK

WILLAMETTE VALLEY WATER SUPPLIES WILL BE EXCELLENT DURING THE SPRING AND SUMMER OF 1974. THE MOUNTAIN SNOWPACK IS TWICE THE MARCH 1 AVERAGE IN SOME LOCATIONS. LOWER TEMPERATURES DURING FEBRUARY, COMBINED WITH ABOVE AVERAGE PRECIPITATION, RESULTED IN A SIGNIFICANT INCREASE IN THE LOWER ELEVATION SNOWPACK. POWER RESERVOIRS ARE BEING HELD AT THEIR NORMAL LOW LEVELS.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Calapooya	Excellent	Excellent
Clackamas	Excellent	Excellent
McKenzie	Excellent	Excellent
Molalla	Excellent	Excellent
Santiam, North	Excellent	Excellent
Santiam, South	Excellent	Excellent
Willamette, Coast Fork	Excellent	Excellent
Willamette, Middle Fork	Excellent	Excellent



U.S.D.A. SOIL CONSERVATION SERVICE
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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Clackamas at Estacada	927	138	April-July		674
	1047	133	April-Sept.		789
Clackamas above Three Lynx	719	142	April-July		506
	824	136	April-Sept.		604
McKenzie at McKenzie Bridge ^d	576	127	April-July		453
	748	125	April-Sept.		598
McKenzie near Vida ^d	1339	129	April-July		1035
	1605	127	April-Sept.		1262
McKenzie, So. Fork near Rainbow ^d	289	138	April-July		210
	317	133	April-Sept.		239
Oak Grove Fork above Power Intake	166	135	April-July		123
	217	134	April-Sept.		162
Row near Dorena	136	136	April-July		98
	140	137	April-Sept.		102
Santiam, North at Mehama ^d	932	122	April-July		765
	1037	119	April-Sept.		872
Santiam, South at Waterloo ^d	693	123	April-July		564
	722	116	April-Sept.		623
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge ^d	911	134	April-July		678
	1018	131	April-Sept.		779
Willamette, No. Fk. of Mid. Fk. near Oakridge	239	126	April-July		189
	259	124	April-Sept.		209
Willamette at Salem ^d	5509	125	April-July		4397
	6012	122	April-Sept.		4943

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Clackamas River	2	645	205
McKenzie River	3	400	165
Row River	2	520	200
Santiam River	4	565	175
Willamette, Mid. Fk.	5	300	165

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Blue River	85.6*	31.7	22.1	- -
Cottage Grove	30.0*	7.6	7.7	8.4
Cougar	155.2*	49.4	25.7	41.7
Detroit	299.9*	103.9	56.1	110.6
Dorena	70.5*	18.1	16.3	19.8
Fall Creek	115.0*	45.6	23.8	37.5
Fern Ridge	94.2*	35.2	32.0	36.3
Foster	30.0*	10.4	4.3	6.0
Green Peter	270.0*	114.0	63.2	109.7
Hills Creek	200.0*	75.7	45.2	59.9
Lookout Point	337.2*	108.2	31.0	97.3
Timothy Lake	61.7	56.3	50.2	53.0
*Multiple purpose reservoir--space reserved primarily for flood runoff.				

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

ROGUE, UMPQUA, WATERSHEDS

OREGON

as of

MARCH 1, 1974

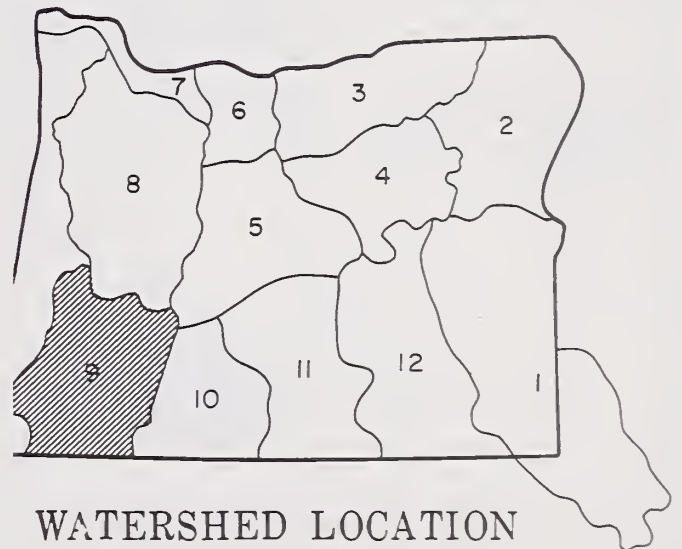
GENERAL OUTLOOK

THE WATER SUPPLY OUTLOOK IS NEAR AVERAGE IN THE ILLINOIS BASIN AND EXCELLENT THROUGHOUT THE REMAINDER OF THE ROGUE AND UMPQUA WATERSHEDS. THE SNOWPACK VARIES FROM NEAR NORMAL IN THE ILLINOIS WATERSHED TO 185% OF AVERAGE IN THE NORTH UMPQUA. PRECIPITATION DURING FEBRUARY WAS 130% OF AVERAGE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Althouse Creek	Average	Average
Applegate River, Big	Average	Average
Applegate River, Little	Average	Average
Ashland Creek	Excellent	Excellent
Butte Creek, Big	Excellent	Excellent
Butte Creek, Little	Excellent	Excellent
Cow Creek	Average	Average
Deer Creek	Excellent	Average
Elk Creek	Average	Average
Emigrant Creek (abv. res.)	Average	Average
Evans Creek	Average	Average
Gold Hill Irrigation Dist.	Excellent	Average
Grants Pass Irrig. Dist.	Excellent	Average
Grave Creek	Excellent	Average
Illinois River, East Fork	Average	Average
Illinois River, West Fork	Average	Average
Jump-off-Joe Creek	Average	Average
Neil Creek	Average	Average
Red Blanket Creek	Excellent	Average
Rogue River	Excellent	Average
Sucker Creek	Average	Average
Table Rock Irrig. Dist.	Excellent	Average
Thompson Creek	Average	Average
Wagner Creek	Excellent	Average
Williams Creek	Average	Average



WATERSHED LOCATION

U.S.D.A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Applegate near Copper	152	114	April-Sept.		133
Clearwater above Trap Creek ^d	96	139	April-Sept.		69
Fourmile Lake net Inflow ^d	5.6	130	April-Sept.		4.3
Hyatt Reservoir net Inflow ^d	4.9	107	April-July		4.6
Illinois River near Kerby	178	93	April-July		191
	184	93	April-Sept.		197
Little Butte, N. Fk. at Fish Lake nr. Lake Cr. ^d	16.2	118	April-Sept.		13.7
Little Butte, S. Fk. near Lake Creek	38	136	April-July		28
Rogue above Prospect	302	118	April-July		256
	363	116	April-Sept.		311
Rogue, South Fork near Prospect ^d	75	124	April-July		61
	89	124	April-Sept.		72
Rogue at Raygold near Central Point	877	119	April-July		735
	1060	119	April-Sept.		890
Rogue at Grants Pass	944	106	April-Sept.		890
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls ^d	223	134	April-Sept.		166

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	100	May 31	May 27
Rogue at Raygold	1200	Sept. 20	Aug. 7
	*2180	July 1	
	*1440	Aug. 15	
*Average daily cfs forecast to flow on this date.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
Emigrant Lake	39.0	32.0	26.1	28.5*
Fish Lake	8.0	5.1	7.8	5.5
Fourmile Lake	16.1	- -	11.2	8.7
Howard Prairie	60.0	60.6	42.9	35.9
Hyatt Prairie	16.1	13.5	9.4	11.3
*Average for years of record (in base period) after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS).

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
Applegate	3	205	120
Bear Creek	2	230	155
Butte Creek	4	205	150
Illinois River	3	190	100
North Umpqua	3	365	185
Rogue River	6	210	145

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON
as of

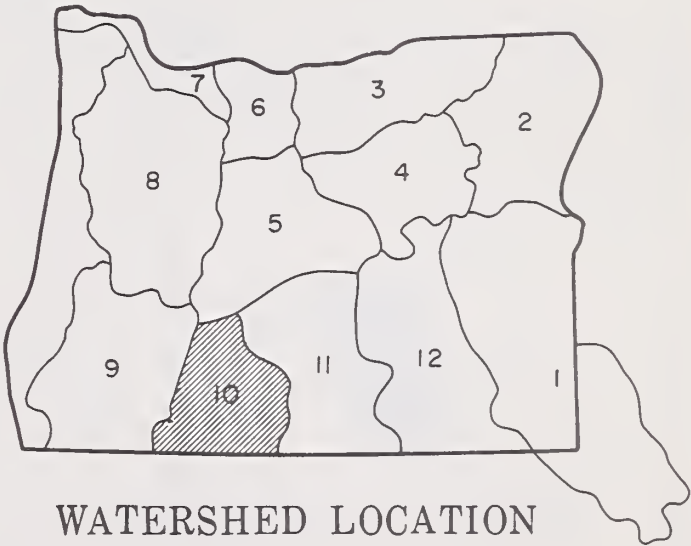
MARCH 1, 1974

GENERAL OUTLOOK

MOST KLAMATH COUNTY WATER USERS WILL HAVE AN ADEQUATE WATER SUPPLY NEXT SPRING AND SUMMER. THE MOUNTAIN SNOWPACK IS NOW AT 130% OF AVERAGE WITH RESERVOIR STORAGE AT NEARLY 120%. PRECIPITATION DURING FEBRUARY WAS 119% OF NORMAL.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ft. Klamath Valley	Average	Average
Lost River (Clear Lake)	Average	Average
Lost River (Gerber)	Excellent	Average
Lost River (Willow Res.)	Average	Average
Sprague River	Average	Average
Upper Klamath Lake	Excellent	Average
Williamson River	Excellent	Average



U.S.D.A. SOIL CONSERVATION SERVICE
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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Clear Lake Reservoir Inflow ^k	96	143	March-July	40	67
Gerber Reservoir Inflow ^k	44	142	March-July	16.6	31
Sprague near Chiloquin	312	115	March-July		271
	280	115	April-Sept.		242
Upper Klamath Lake net Inflow ^k	761	120	March-July		634
	645	120	April-Sept.		536
Williamson below Sprague River	545	120	March-July		454
	497	120	April-Sept.		414

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Upper Klamath	1	126	112

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Clear Lake	440.2	298.6	310.4	227.1
Gerber	94.0	56.9	59.4	53.5
Upper Klamath Lake	584.0	482.0	443.7	422.6

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Lost River	8	200	130
Sprague River	3	170	115
Upper Klamath	8	200	130
Williamson River	3	225	140

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
LAKE COUNTY, GOOSE LAKE WATERSHEDS
OREGON

as of
MARCH 1, 1974

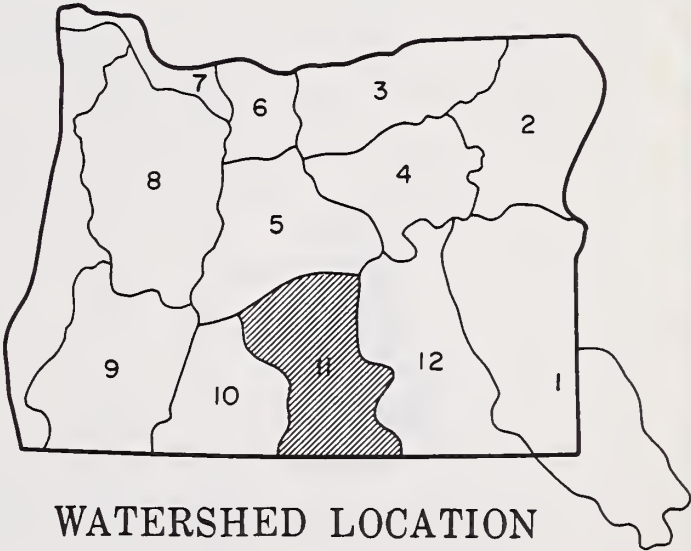
GENERAL OUTLOOK

NEAR AVERAGE WATER SUPPLIES SHOULD BE AVAILABLE IN THE LAKE COUNTY, GOOSE LAKE AREA THIS SPRING AND SUMMER. ALTHOUGH THE FEBRUARY PRECIPITATION WAS ONLY 73% OF AVERAGE, A NEARLY NORMAL SNOWPACK EXISTS THROUGHOUT MOST OF THE AREA, WITH SIGNIFICANT INCREASES OCCURRING IN DREW AND SILVER CREEK WATERSHEDS. RESERVOIR STORAGE IS CURRENTLY AT 130% OF AVERAGE AND THE SOIL MOISTURE REMAINS ABOVE NORMAL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Chewaucan River	Excellent	Average
Crooked Creek	Average	Average
Deep Creek	Average	Average
Dry Creek	Average	Average
East Side Goose Lake	Average	Average
Guano Lake	Average	Average
Honey Creek	Average	Average
Lakeview Water Users Assn.	Average	Average
Rock Creek (Hart Mountain)	Average	Average
Silver-Buck Creeks	Average	Fair
Summer Lake	Average	Average
Thomas Creek	Average	Average
Twentymile Creek	Average	Average
Warner Lakes	Average	Average



WATERSHED LOCATION

U.S.D.A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY.....OREGON STATE ENGINEER

Report prepared by
T.A. GEORGE and J.W. HAGLUND
SOIL CONSERVATION SERVICE
1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Chewaucan near Paisley	104	120	March-July	49	87
Deep above Adel	80	103	March-July	51	78
Drews Reservoir net Inflow ^d	40	100	March-July		40
Honey Creek near Plush	18.4	94	March-July	11.3	19.5
Silver Creek near Silver Lake ^d	12.7	92	April-July		13.7
Twentymile near Adel	28	108	March-July	19.6	26

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average i
Chewaucan, Silver Creek, Drew Creek	1	126	112
Honey, Deep, 20-Mi. Cr.	1	102	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
Cottonwood	8.7	5.9	2.2	4.0*
Drews	63.0	51.1	42.0	39.8
*Average for years of record (in base period) after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
Chewaucan River	3	170	115
Deep Creek	3	110	100
Drew Creek	3	90	85
Honey Creek	3	110	90
Silver Creek	3	195	85
Twentymile Creek	3	95	100

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

HARNEY BASIN WATERSHEDS

OREGON

as of

MARCH 1, 1974

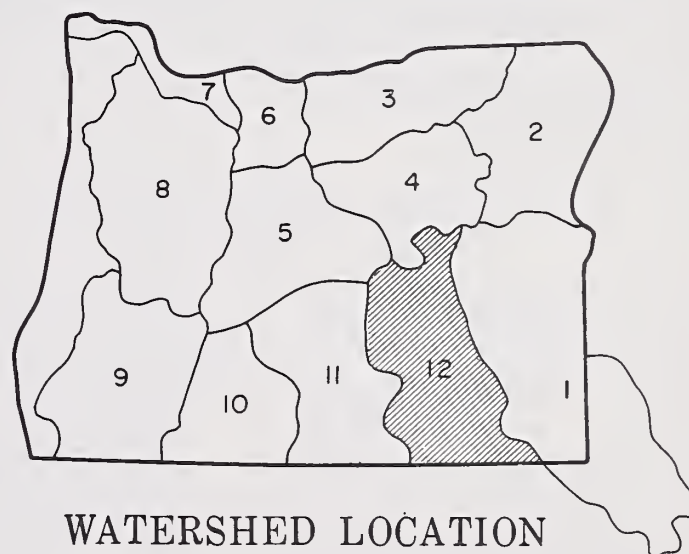
GENERAL OUTLOOK

NEAR AVERAGE WATER SUPPLIES ARE FORECAST FOR HARNEY BASIN WATER USERS FOR THE SPRING AND SUMMER MONTHS. SNOWPACK THROUGHOUT THE BASIN IS AVERAGE, EXCEPT FOR THE SILVIES RIVER, WHICH IS AT 150%. ABOVE AVERAGE PRECIPITATION DURING FEBRUARY MAINTAINED THE HIGH SOIL MOISTURE CONTENT.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Catlow Valley	Average	Average
Cow Creek	Average	Fair
Donner und Blitzen River	Average	Average
Mill-Coffeepot Creeks	Average	Average
Rattlesnake Creek	Average	Average
Silver Creek	Excellent	Average
Silvies River	Excellent	Average
Soldier-Prather Creek	Average	Fair
Trout Creek	Average	Fair
Whitehorse Creek	Average	Average



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Donner und Blitzen near Frenchglen	49	89	March-July		55
	46	88	April-Sept.		53
Silver near Riley	17.9	115	April-July		15.6
Silvies River near Burns	148	157	March-July		94
	117	157	April-Sept.		74
Trout Creek near Denio	10.0	119	March-July		8.4
	9.5	120	April-Sept.		7.9

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Silvies River, Silver Cr.	3	119	113
Trout Cr., Donner und Blitzen River	1	101	121

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Donner und Blitzen R.	4	85	90
Silver Creek	3	145	95
Silvies River	4	190	150
Trout Creek	3	60	100

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 1

MARCH 1, 1974

SNOW

SNOW	THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Average
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	2/28	34	10.1	4.4	4.2 ^h
Battle Creek ^e (Ida.)				3.6	2.9
Bear Creek ^e (Nev.)	2/23	63	17.8	16.8	17.3
Big Bend (Nev.)	2/26	37	11.4	6.6	7.6
Blue Mountain Springs	2/28	69	23.2	11.2	14.1
Blue Mtn. Springs Pillow*	b			8.8	-
Buck Pasture ^e	b			1.6	2.1
Buckskin, Lower (Nev.)	3/4	33	9.6	7.6	7.4
Buckskin, Upper (Nev.)	3/4	27	9.6	9.2	8.7 ^m
Bull Basin ^e (Ida.)	b			1.1	1.1
Bully Creek ^e	b			3.1	2.5
Call Meadow ^e	b			3.4	4.0
Columbia Basin ^e (Nev.)	2/25	48	14.4	7.6	8.1 ^h
Cottonwood-Indian ^e	b			0.0	0.8
Crane Prairie	2/28	45	13.4	6.0	8.6
Disaster Peak (Nev.)	2/26	45	14.1	12.5	13.4
Eldorado Pass	2/27	11	2.4	3.1	2.8
Fawn Creek (Nev.)	2/25	21	6.3	4.9	4.4 ^h
Fish Creek	3/1	60	20.7	20.7	21.1 ^h
Fish Creek Pillow*	b			23.5	-
Flag Prairie ^e	b			3.3	4.2 ^m
Fox Creek (Nev.)	2/23	41	11.0	8.8	9.0
Fry Canyon (Nev.)	2/26	32	9.8	7.2	6.3
Gold Creek (Nev.)	2/26	25	7.5	4.1	4.9
Granite Peak (Nev.)	3/5	36	11.8	15.9	13.2
Hyde Pasture ^e (Ida.)	b			3.9	4.9
Jack Creek, Lower (Nev.)	c				
Jack Creek, Upper (Nev.)	2/25	24	7.4	4.7	7.7
Jack Peak (Nev.)	c				
Lake Creek R. S.	2/28	49	14.0	7.1	9.1
Laurel Draw ^e (Nev.)	2/28	35	10.5	7.4	6.4
Logan Valley ^e	b			5.9	7.4 ^h
Lookout Butte ^e	b			0.0	0.2 ^m
Louse Canyon ^e	b			2.2	2.8 ^m
Martin Creek (Nev.)	3/5	29	9.0	9.3	8.9
Merritt Mountain ^e (Nev.)	2/25	24	7.0	-	5.8 ^h
Midas (Nev.)	2/25	11	3.2	1.8	3.3
Mud Flat (Ida.)	2/28	30	8.4	4.8	5.4
Oregon Canyon ^e	b			7.5	4.8
Quinn Ridge ^e (Nev.)	b			0.6	1.8 ^h
Red Canyon ^e (Ida.)	b			5.9	5.9 ^m
Rock Spring	2/26	24	6.2	4.3	4.9
Rodeo Flat (Nev.)	2/27	26	6.5	6.7	4.9
76 Creek (Nev.)	2/23	50	14.8	10.4	10.0
Silver City (Ida.)	2/25	51	16.6	8.6	13.8
Silvies	3/1	22	6.9	9.3	9.9 ^h
Silvies Pillow*	b			12.1	-
South Mountain #2 (Ida.)	3/4	47	16.2	7.4	10.7
Stag Mountain ^e (Nev.)	2/25	24	7.0	6.8	5.0 ^h
Stinking Water	2/28	5	1.8	2.2	1.9 ^h
Succor Creek ^e (Ida.)	3/1	22	6.6	3.4	5.4
Taylor Canyon (Nev.)	2/27	23	6.7	6.0	4.1
Toe Jam ^e (Nev.)	2/25	34	9.9	10.8	7.9 ^h
Tremewan Ranch (Nev.)	2/26	6	2.0	3.0	1.2
Triangle ^e (Ida.)	b			0.0	0.6
Trout Creek ^e	b			10.2	6.4 ^m
"V" Lake ^e	b			6.5	4.9 ^m
Vaught Ranch ^e (Ida.)	b			5.4	3.3 ^m
War Eagle ^e (Ida.)	b			18.2	22.1 ^m

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #1	2/27	123	49.6	23.6	31.4
Aneroid Lake #2	2/26	105	43.4	21.8	27.9
Anthony Lake	2/26	82	30.1	15.5	22.4
Bald Mountain ^e (Ore.)	2/24	82	27.9	13.5	20.1 ^m
Beaver Reservoir (Rev.) ^{1/}	2/26	51	16.0	5.8	11.0
Big Sheep ^e	2/24	99	39.6	19.1	23.1 ^m
Blue Mtn. Summit	2/28	41	10.7	5.3	7.7
Bourne	2/27	66	20.8	9.9	14.1
County Line	2/28	22	6.3	2.2	4.5
Dooley Mountain	2/25	35	11.7	7.1	8.1
Eilertson Meadows	2/26	46	16.0	6.4	10.1
Eldorado Pass	2/27	11	2.4	3.1	2.8
Gold Center	2/27	54	16.9	8.8	11.7
Goodrich Lake	2/26	136	61.5	25.4	35.4
Intake House	2/26	48	15.7	7.0	10.4 ^h
Little Alps	2/26	55	17.5	7.0	11.8 ^h
Little Antone	2/26	28	7.8	3.9	7.2 ^m
Lucky Strike	2/28	46	12.4	7.5	11.0
Lucky Strike Pillow*	b			6.8	- -
Meacham	2/27	55	19.4	3.6	8.1
Mirror Lake	2/24	237	99.5	46.2	59.0 ^m
Moss Spring	2/27	84	28.4	12.8	19.9
Power Plant	2/26	22	6.5	3.5	5.4 ^h
Schneider Meadow	2/25	120	43.5	26.5	27.3
Schoolmarm	2/28	17	4.4	2.0	3.7
Standley	2/24	107	42.8	22.4	25.6 ^m
Taylor Green	2/27	63	20.4	10.6	14.7
Tipton	2/28	52	15.7	7.4	9.4
Tipton Snow Pillow*	2/28		19.5	7.5	- -
Tollgate	2/28	117	42.4	12.0	21.4
TV Ridge	2/24	70	22.4	10.2	18.2 ^m
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	2/27	43	13.5	5.0	9.2
Arbuckle Mtn. Pillow*	2/27		25.8	14.1	- -
Battle Mountain Summit	2/27	9	2.6	0.0	2.0 ^h
Blue Mountain Camp	2/28	78	31.4	5.6	12.6 ^h
Butte Creek Summit	2/25	5	1.5	- -	- -
Emigrant Springs	2/27	31	11.4	T	4.0
High Ridge Pillow*	b			20.5	- -
Lucky Strike	2/28	46	12.4	7.5	11.0
Lucky Strike Pillow*	b			6.8	- -
Meacham	2/27	55	19.4	3.6	8.1
Tollgate	2/28	117	42.4	12.0	21.4
Weston Mountain	2/28	0	0.0	0.0	0.0 ^m

BASIC DATA SUPPLEMENT 1

MARCH 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. 2 Yrs.
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	2/26	82	30.1	15.5	22.4
Arbuckle Mountain	2/27	43	13.5	5.0	9.2
Arbuckle Mt. Pillow*	2/27		25.8	14.1	- -
Battle Mountain Summit	2/27	9	2.6	0.0	2.0 ^h
Beech Creek Summit	2/27	13	4.0	3.7	4.0
Blue Mountain Springs	2/28	69	23.2	11.2	14.1
Blue Mt. Springs Pillow*	b			8.8	- -
Blue Mountain Summit	2/28	41	10.7	5.3	7.7
Butte Creek Summit	2/25	5	1.5	- -	- -
Derr	2/27	36	12.5	6.6	8.5
Gold Center	2/27	54	16.9	8.8	11.7
Indian Creek Butte ^e	b			18.6	20.8
Izee Summit	2/26	33	8.8	5.6	7.0
Lucky Strike	2/28	46	12.4	7.5	11.0
Lucky Strike Pillow*	2/28		16.2	6.8	- -
Marks Creek	2/27	11	2.8	0.0	2.9
Ochoco Meadows	2/28	42	12.2	5.6	8.1
Olive Lake ^e	2/27		25.0 ^g	9.2	17.6 ^h
Schoolmarm	2/28	17	4.4	2.0	3.7
Snow Mountain	2/27	48	12.9	9.5	11.9 ^h
Snow Mt. Pillow**	b			6.0	- -
Starr Ridge	2/26	28	7.6	2.8	4.9
Tipton	2/28	52	15.7	7.4	9.4
Tipton Snow Pillow*	2/28		19.5	7.5	- -
Williams Ranch	2/26	6	1.5	0.0	1.4 ^h
UPPER DESCHUTES, CROOKED WATERSHEDS					
Bald Peter	b			14.6	- -
Caldwell Ranch	2/27	45	13.7	4.9	8.6 ^h
Cascade Summit	2/28	115	39.6	13.7	23.6
Chemult	2/27	39	10.8	6.4	8.9
Chemult Alternate	2/27	44	13.0	7.6	- -
Derr	2/27	36	12.5	6.6	8.5
Hogg Pass	2/28	157	55.7	13.0	33.2
Hungry Flat	2/25	21	7.1	0.0	4.6
Irish-Taylor Pillow ^{1/} **	2/25		50.0	- -	32.6 ^h
Lionshead ^e	b			- -	- -
Marks Creek	2/27	11	2.8	0.0	2.9
New Crescent Lake	2/26	63	20.7	5.9	11.8
New Dutchman Flat #2	2/25	155	58.3	27.4	43.4
Ochoco Meadows	2/28	42	12.2	5.6	8.1
Racing Creek	2/28	83	21.2	5.1	- -
Snow Mountain	2/27	48	12.9	9.5	11.9 ^h
Snow Mt. Pillow**	b			6.0	- -
Tamarack	2/25	21	6.4	3.2	4.5
Tangent	2/25	101	36.4	12.9	20.0
Three Creek Butte	2/28	52	16.1	4.2	9.0
Three Creek Meadow	2/28	77	25.2	6.3	15.6
Three Creek Mdw. Pillow**	b			9.7	- -
Waldo Lake	2/27	117	39.9	14.1	23.3
Whitewater Meadow ^e	b			- -	- -
Willamette Pass	2/26	141	52.0	20.1	32.6 ^h
Willamette Pass Pillow**	b			- -	- -

SNOW

SNOW	THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows	2/26	39	13.8	3.5	9.6 ^h
Clear Lake	2/25	48	15.5	2.0	7.8
Clear Lake (Experimental)	2/25	74	24.6	5.8	12.3
Cooper Spur (Revised) ^{1/}	3/4	65	20.2	5.5	10.6
Greenpoint	3/2	83	28.3	5.9	13.6
Knebal Springs	2/26	28	10.2	3.5	6.7 ^h
Mt. Hood Test Site ^{1/} **	b			23.0	52.3
Parkdale	3/4	0	0.0	0.0	-
Red Hill	b			14.4	31.6
Still Creek	2/25	101	39.2	7.7	18.3
Still Creek Alt. #2	2/25	100	38.5	9.0	-
Switchback	3/2	80	25.6	7.0	10.7 ^h
Tilly Jane	2/22	141	55.5	14.0	33.7
Ulrich Ranch Junction	2/26	19	6.4	3.4	3.6 ^h
Umbrella Falls	b			26.0	56.7 ^h
Upper Valley	3/4	16	4.2	0.0	4.0 ^h
WILLAMETTE WATERSHEDS					
Cascade Summit	2/28	115	39.6	13.7	23.6
Champion	2/27	126	50.1	11.0	23.2 ^h
Clackamas Lake	2/27	58	18.1	3.4	10.3
Clear Lake	2/25	48	15.5	2.0	7.8
Clear Lake (Expt.)	2/25	74	24.6	5.8	12.3
Dead Horse Grade	2/27	63	21.2	4.9	13.5
Detroit (Town)	2/28	4	1.7	0.0	0.9
Detroit Dam	2/28	T	T	0.0	0.5
Golden Curry Creek	2/27	20	7.2	0.0	5.2 ^m
Hogg Pass	2/28	157	55.7	13.0	33.2
Lake Harriet	3/1	2	0.2 ^g	0.0	2.3 ^m
Laurel Mountain	3/6	45	14.6	0.0	-
Layng Creek	2/27	T	T	0.0	0.1
Lookout Point Dam	2/28	0	0.0	0.0	0.0
Lost Creek Ranch	2/27	7	2.1	0.0	3.6
Lund Park	2/27	2	0.2	0.0	0.5
Marion Forks	2/28	60	20.7	2.2	10.8 ^h
Marys Peak (Revised) ^{1/}	2/27	34	9.9	0.4	10.0 ^m
McCredie Springs	2/28	T	T	0.0	0.4
McKenzie	2/27	156	62.6	17.8	36.2
McKenzie Bridge	2/27	0	0.0	0.0	0.6
Mill City	2/28	0	0.0	0.0	0.1
Mt. Hood Test Site ^{1/} **	b			23.0	52.3
Oakridge	2/28	0	0.0	0.0	0.0
Peavine Ridge Pillow**	2/25		27.2	4.6	13.1 ^h
Railroad Overpass	2/28	6	2.0	0.0	1.9
Saddle Mountain Pillow**	2/26		9.5	0.0	-
Salt Creek Falls	2/28	62	21.7	3.7	12.3
Santiam Junction	2/28	105	37.6	5.8	19.2
Seine Creek Pillow**	2/26		2.9	0.0	-
Still Creek	2/25	101	39.2	7.7	18.3
Still Creek Alt. #2	2/25	100	38.5	9.0	-
Timothy Lake	3/1	81	26.8	4.1	12.8 ^m
Valsetz Summit	3/1	18	4.6	0.0	-
Vida	2/27	0	0.0	0.0	0.1
Waldo Lake	2/27	117	39.9	14.1	23.3 ^h
Weaver Creek	2/27	6	1.2	0.0	0.7 ^m
White Branch Slide	2/27	23	7.5	0.0	5.6
Whitewater Bridge	2/28	11	4.4	0.0	3.9
Willamette Pass	2/26	141	52.0	20.1	32.6 ^h
Willamette Pass Pillow**	b			-	-

BASIC DATA SUPPLEMENT 1

MARCH 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i
ROGUE, UMPQUA WATERSHEDS					
Althouse (Revised) ^{1/}	2/27	27	7.2	5.0	6.5
Annie Spring	2/28	161	58.1	30.2	36.3
Beaver Dam Creek	2/27	44	13.8	8.5	11.5 ^h
Big Red Mountain	2/25	101	36.5	18.5	26.4
Billie Creek Divide	2/28	80	25.0	13.6	17.9
Caliban	2/27	131	49.3	20.8	29.5
Caliban (Alternate)	2/27	138	45.8	-	-
Champion	2/27	126	50.1	11.0	23.2
Cold Springs Camp	3/5	134	45.0	21.2	28.2
Cold Spgs. Camp Pillow**	b			19.4	-
Deadwood Junction	2/27	27	8.1	6.2	8.1 ^h
Diamond-Crater Sum (Rev) ^{1/}	2/28	128	41.8	17.0	25.8 ^h
Diamond Lake	2/28	95	27.9	10.2	17.2
Fish Lake	2/28	59	18.3	9.1	11.5
Fourmile Lake	c			19.0	21.3
Grayback Peak	2/27	71	22.2	11.7	22.7
Howard Prairie Reservoir	2/27	28	9.6	6.1	7.8
Hyatt Prairie	2/27	22	9.1	3.9	7.0
King Mountain #1	2/27	31	7.0	3.7	8.1
King Mountain #2	2/27	26	5.0	1.5	5.8 ^h
King Mountain #3	2/27	12	1.6	0.0	1.9 ^h
King Mountain #4	2/27	T	T	0.0	0.0 ^h
King Mountain #5	2/27	T	T	0.0	0.0 ^h
King Mountain #6	2/27	0	0.0	0.0	0.0 ^h
Little Red Mountain	2/25	80	27.8	11.8	21.6
Mt. Ashland Switchback	2/28	151	48.0	21.3	28.2 ^h
Mule Creek	2/27	31	6.7	0.0	-
North Umpqua	2/27	64	22.3	5.0	11.5
Page Mountain	2/27	16	3.4	0.0	3.6
Park Headquarters	3/1	208	80.5	37.0	48.6
Red Butte #1	2/25	61	22.2	3.7	11.0 ^h
Red Butte #2	2/25	32	11.5	1.9	7.3 ^h
Red Butte #3	2/25	19	6.3	0.0	5.7 ^h
Red Butte #4	2/25	4	1.5	0.0	2.2 ^h
Red Butte #5	2/25	0	0.0	0.0	0.5 ^h
Red Butte #6	2/25	0	0.0	0.0	0.2 ^h
Seven Lakes #2	2/26	132	46.9	24.4	33.6 ^h
Seven Mile	2/27	113	37.0	21.4	-
Silver Burn	2/26	49	15.9	5.5	10.9
Siskiyou Summit (Rev.) ^{1/}	2/27	16	5.2	T	6.3
Ski Bowl Road	2/27	112	33.4	16.0	24.0 ^h
South Fork Canal	2/27	0	0.0	0.0	2.0
Trap Creek	2/27	55	20.7	4.2	9.2
Whaleback	2/27	123	34.1	17.7	26.4

SNOW

SNOW	THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i
KLAMATH WATERSHEDS					
Annie Spring	2/28	161	58.1	30.2	36.3
Billie Creek Divide	2/28	80	25.0	13.6	17.9
Chemult	2/27	39	10.8	6.4	8.9
Chemult (Alternate)	2/27	44	13.0	7.6	-
Chiloquin (PP&L)	2/28	T	T	-	1.0
Cold Springs Camp	3/5	134	45.0	21.2	28.2
Cold Spgs. Camp Pillow**	b			19.4	-
Crazyman Flat ^e	2/26	30	10.0	5.4	8.5
Crowder Flat ^e (Calif.)	2/27	4	0.8	1.2	2.1
Crystal (PP&L)	2/28	23	6.9	-	7.2
Diamond-Crater Sum. (Rev) ^{1/}	2/28	128	41.8	17.0	25.8 ^h
Diamond Lake Junction (97)	2/28	23	5.8	10.2	17.2
Dog Hollow	2/27	4	0.8	0.0	0.5
Finley Corrals ^e	2/27	46	17.0	12.6	14.2
Fort Klamath (PP&L)	3/1	8	2.4 ^g	-	2.9
Fourmile Lake	c			19.0	21.3 ^h
Gerber	3/1	8	2.2	T	1.9 ^h
Harriman (PP&L)	2/28	15	4.5 ^g	2.8	3.3 ^m
Howard Prairie	2/27	28	9.6	6.1	7.8 ^h
Hyatt Prairie Reservoir	2/27	22	9.1	3.9	7.0
Kirk (PP&L)	b			-	5.2 ^m
Lake of the Woods	2/25	37	8.9	5.0	9.2
Park Headquarters	3/1	208	80.5	37.0	48.6
Quartz Mountain	2/26	10	2.0	4.4	5.6
Seven Lakes #2	2/26	132	46.9	24.4	33.6 ^h
Seven Mile	2/27	113	37.0	21.4	-
State Line ^e (Calif.)	2/27	28	8.4	6.6	7.5
Strawberry	b			6.8	6.5
Strawberry ^e	2/27	20	6.6	4.5	6.4 ^h
Summer Rim	2/27	59	22.1	10.1	14.5
Summer Rim Pillow*	2/27		20.0	8.9	-
Summer Rim ^e	2/26	44	16.2	10.2	-
Sycan Flat ^e	2/26	15	4.5	2.2	6.2
Taylor Butte	2/25	15	4.4	2.4	4.4
LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Adin Mountain (Calif.)	2/26	45	15.0	10.8	10.9
Bald Mountain (Nev.)	3/4	8	2.5	3.9	3.4
Bear Flat Meadow ^e	2/27	26	8.6	8.1	9.1
Camas Creek	2/27	27	8.2	6.8	9.2
Cedar Pass (Calif.)	2/26	50	15.0	11.7	13.1
Colvin Creek ^e	3/4	15	4.5	2.4	4.6 ^m
Cox Flat ^e	2/27	18	5.4	6.6	6.8
Crowder Flat ^e (Calif.)	2/27	4	0.8	1.2	2.1
Dismal Swamp ^e (Calif.)	b			15.6	14.1
Finley Corrals ^e	2/27	46	17.0	12.6	14.2
Hart Mountain ^e	3/4	6	1.2	1.7	1.5
Little Bally Mtn. ^e (Nev.)	3/4	15	4.5	3.6	2.3 ^h
Mt. Bidwell (Calif.)	c				
North Star (Calif.)	c				
Patton Meadows ^e	2/27	48	17.8	13.8	15.0 ^m
Quartz Mountain	2/26	10	2.0	4.4	5.6
Sherman Valley ^e	b			8.4	10.5
Silver Creek	2/28	7	1.9	0.9	2.1
State Line ^e (Calif.)	2/27	28	8.4	6.6	7.5
Strawberry	b			6.8	6.5
Strawberry ^e	2/27	20	6.6	4.5	6.4 ^h
Summer Rim	2/27	59	22.1	10.1	14.5
Summer Rim Pillow*	2/27		20.0	8.9	-
Summer Rim ^e	2/26	44	16.2	10.2	-
Sycan Flat ^e	2/26	15	4.5	2.2	6.2
Willow Creek ^e	b			2.4	3.3

BASIC DATA SUPPLEMENT 1

MARCH 1, 1974

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave ⁺
HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	2/28	69	23.2	11.2	14.1
Blue Mtn. Springs Pillow*	b			8.8	- -
Buck Pasture ^e	b			1.6	2.1 ⁿ
Buckskin Lake ^e	b			0.0	0.3 ⁿ
Call Meadows ^e	b			3.4	4.0 ⁿ
Delintment Lake	2/27	26	6.2	5.0	6.6 ⁿ
Denio Creek ^e	b			0.8	0.5 ⁿ
Disaster Peak (Nev.)	2/26	45	14.1	12.5	13.4
Emigrant Butte	2/28	8	1.8	1.1	3.9 ⁿ
Fish Creek	3/1	60	20.7	20.7	21.1 ⁿ
Fish Creek Pillow*	b			23.5	- -
Fish Creek ^e	b			20.7	- -
Hart Mountain ^e	3/4	6	1.2	1.7	1.5
Idlewild Camp	2/28	25	7.3	2.0	4.8
Idlewild Camp Alternate	2/28	18	6.7	1.3	- -
Izee Summit	2/26	33	8.8	5.6	7.0
Lake Creek R. S.	2/28	49	14.0	7.1	9.1
Oregon Canyon ^e				7.5	4.8
Rock Spring	2/26	24	6.2	4.3	4.9
Silvies	3/1	22	6.9	9.3	9.9
Silvies Pillow*	b			12.1	- -
Silvies ^e	b			6.9	- -
Snow Mountain	2/27	48	12.9	9.5	11.9
Snow Mountain Pillow**	b			6.0	- -
Starr Ridge	2/26	28	7.6	2.8	4.9
Stinking Water	2/28	5	1.8	2.2	1.9
Trout Creek ^e	b			10.2	6.4
"V" Lake ^e	b			6.5	4.9

*Manometer reading.

**Telemetry reading.

1/Location has been changed--surveys are made on an alternate site and data has been revised accordingly.

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.†

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBK records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 2

MARCH 1, 1974

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)			Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity	This Year		Last Year	Average	
OWYHEE, MALHEUR WATERSHEDS								
Bear Creek (Nev.)	7800	72	16.8	2/23	10.7	10.4	11.5	
Big Bend (Nev.)	6700	48	16.7	2/26	15.4	12.9	15.0	
Blue Mountain Spring	5900	42	16.9	2/28	11.6	6.4	10.0 ^m	
Jack Creek	6800	48	8.6	c				
Jordan Valley	4390	48	19.3	b		15.4	15.8 ^m	
Mud Flat (Ida.)	5500	48	12.8	b		11.2	12.4 ^m	
Rodeo Flat (Nev.)	6800	42	11.0	2/26	7.4	9.0	9.0	
Taylor Canyon (Nev.)	6200	48	15.1	2/23	10.9	9.5	12.5	
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS								
Blue Mountain Summit	5100	36	16.8	2/28	14.7	9.3	11.0 ^m	
Dooley Mountain	5430	36	9.2	2/25	4.8	3.5	4.1 ^m	
Emigrant Springs	3925	48	22.3	2/27	21.0	18.9	20.4 ^m	
Ladd Summit	3730	48	18.9	2/26	13.9	10.4	11.2 ^m	
Moss Springs	5850	36	25.8	2/27	14.8	14.2	15.0 ^m	
Tollgate	5070	48	23.6	2/28	16.3	14.3	19.3	
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS								
Battle Mountain Summit	4340	48	13.8	2/27	13.6	12.8	13.1 ^m	
Emigrant Springs	3925	48	22.3	2/27	21.0	18.9	20.4 ^m	
Tollgate	5070	48	23.6	2/28	16.3	14.3	19.3	
UPPER JOHN DAY WATERSHEDS								
Battle Mountain Summit	4340	48	13.8	2/27	13.6	12.8	13.1 ^m	
Beech Creek	4800	48	21.3	2/27	18.4	15.1	14.0 ^m	
Blue Mountain Spring	5900	42	16.9	2/28	11.6	6.4	10.0 ^m	
Blue Mountain Summit	5100	36	16.8	2/28	14.7	9.3	11.0 ^m	
Derr	5670	24	9.0	2/27	8.8	6.6	8.3 ^m	
Marks Creek	4540	36	14.1	2/27	13.3	-	11.8 ^m	
Snow Mountain	6300	48	16.7	2/27	15.2	12.1	13.7 ^m	
Starr Ridge	5150	36	10.6	2/26	10.6	9.0	9.8	
UPPER DESCHUTES, CROOKED WATERSHEDS								
Derr	5670	24	9.0	2/27	8.8	6.6	8.3 ^m	
Marks Creek	4540	36	14.1	2/27	13.3	-	11.8 ^m	
Snow Mountain	6300	48	16.7	2/27	15.2	12.1	13.7 ^m	
KLAMATH WATERSHEDS								
Quartz Mountain	5230	48	15.3	2/26	9.6	7.6	8.6 ^m	

BASIC DATA SUPPLEMENT 2

MARCH 1, 1974

SOIL MOISTURE

BASIC DATA SUPPLEMENT 3

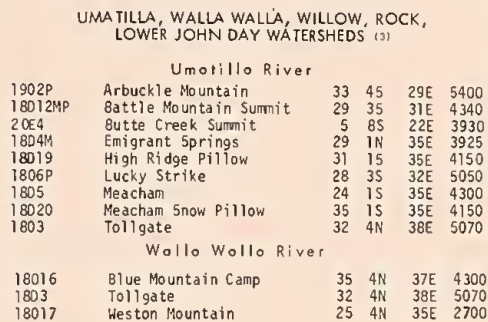
MARCH 1, 1974

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average ⁱ
Allison Work Center (Harney County)	5320	From 1/30 to 2/27	3.94	1.50	
Althouse (Josephine County)	4530	From 1/29 to 2/27	6.08	3.37	
Aneroid Lake #2 (Wallowa County)	7400	From 1/28 ^a to 2/26	14.00		
Arbuckle Mountain (Morrow County)	5400	From 2/1 to 2/23	2.80	2.13	
Brooks Meadow (Hood River County)	4520	From 10/1 to 2/26	42.98	19.13	
Camas Creek (Lake County)	5825	From 1/30 to 2/27	2.60	2.50	
County Line (Umatilla County--Starkey Hdqs.)	4800	From 1/29 to 2/28	1.90	0.23	
Goodrich Lake (Baker County)	6775	From 1/26 to 2/26	2.25		
Lucky Strike (Umatilla County)	5050	From 1/30 to 2/28	4.05	2.20	
Marks Creek (Crook-Wheeler Cos.)	4540	From 1/30 to 2/27	2.50		
Quartz Mt. Summit (Lake County)	6300	From 1/30 to 2/26	2.64	2.00	
Schneider Meadows (Baker County)	5400	From 1/28 to 2/25	6.75		
Silver Creek (Lake County)	4900	From 1/28 to 2/28	2.51	1.02	
Taylor Butte (Klamath County)	5040	From 1/30 to 2/25	2.33	4.72	
Taylor Green (Union County)	5800	From 1/29 to 2/27	5.40		
Tipton (Baker County)	5100	From 1/31 to 2/28	3.67	0.56	

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

NUMBER	NAME	LOCATION			ELEV	NUMBER	NAME	LOCATION			ELEV	NUMBER	NAME	LOCATION			ELEV					
		SEC	TMP	RGL				SEC	TMP	RGL				SEC	TMP	RGL						
Willow Creek																						
1902P	Arbuckle Mountain	33	45	29E	5400	21E6	Hogg Pass	24	135	7-E	4755	21G5a	Oog Hollow	1	40S	14E	4900					
18E1P	Anthony Lake	18	75	37E	7125	21E4	Marton Forks	29	11S	7E	2600	20G14a	Finley Corral	11	36S	16E	6000					
UPPER JOHN DAY WATERSHEDS (4)																						
Upper John Day River																						
1902P	Arbuckle Mountain	33	45	29E	5400	21E8	Dead Horse Grade	13	16S	7E	3700	22G6MP	Quartz Mountain	2	38S	16E	5320					
18012MP	Battle Mountain Summit	29	35	31E	4340	22E4	Lost Creek Ranch	19	16S	7E	1956	22G11	Seven Lakes No. 2	26	33S	5E	6200					
19E2M	Beech Creek Summit	32	43	11S	30E	4650	21E7	McKenzie	35	15S	7-E	4800	22G13	Seven Mile	20	33S	6E	5725				
18E16MP	Blue Mountain Springs	21	15S	35E	5900	22E5	McKenzie Bridge	13	16S	5E	1372	20H1a	State Line (Cal)	21	48N	11E	5750					
18E13M	Blue Mountain Summit	6	12S	36E	5098	22E6	Vida	28	16S	2E	800	20G9AP	Strawberry	4	40S	16E	5760					
20E4	Butte Creek Summit	5	6S	22E	3930	21E9	White Branch Slide	15	16S	7E	2700	20G2AP	Summer Rim	23	33S	16E	7100					
19E3MP	Oerr	14	13S	23E	5670	Middle Fork Willamette River											20G13a	Sycan Flat	25	31S	14E	5500
18E8	Gold Center	21	9S	36E	5340	22F3	Cascade Summit	7	23S	6E	4880	21G3P	Taylor Butte	21	33S	11E	5100					
18E24a	Indian Cr. Butte	5	15S	33E	6550	22F8	Lookout Point Dam	13	19S	1W	750	Pacific Power and Light Company's Snow Stations										
19E9P	Izee Summit	28	16S	29E	5293	22F6	McCredie Springs	36	21S	4E	2120	3	Chiloquin (PP&L)	34	34S	7E	4187					
1806P	Lucky Strike	28	3S	32E	5050	22F7	Oakridge	16	21S	3E	1310	4	Crystal (PP&L)	26	34S	6E	4000					
20E1MP	Marks Creek	25	12S	19E	4540	22F5	Railroad Overpass	21	22S	5E	2750	5	Fort Klamath (PP&L)	22	33S	7E	4150					
20E2	Ochocho Meadows	21	13S	20E	5200	22F2P	Salt Creek Falls	15	24S	6E	5600	8	Harriman Lodge (PP&L)	3	36S	6E	4200					
18E7a	Olive Lake	14	9S	34E	6000	22F14*	Waldo Lake	33	24S	5-E	5600	6	Kirk (PP&L)	1	33S	7E	4533					
1807	Schoolmarin	28	45	34E	4775	Coast Fork Willamette River																
19F1*	Snow Mountain	1	19S	26E	6220	22F9	Champion	12	23S	1E	4500	LAKE COUNTY, GOOSE LAKE WATERSHEDS										
19E7M	Starr Ridge	20	15S	31E	5150	22F10	Golden Curry Creek	1	23S	1E	3130											
18E9P	Tipton	34	10S	35-E	5100	22F13	Layne Creek R.S.	31	21S	1E	1206											
18E25MP	Williams Ranch	20	15S	32E	4500																	
UPPER DESCHUTES, CROOKED WATERSHEDS (5)																						



Map and Index to OREGON SNOW COURSES



The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY

- Douglas County Water Resources Survey

FEDERAL

- Department of Agriculture
 - Cooperative Extension Service
 - Forest Service
 - Soil Conservation Service
- Department of Commerce
 - NOAA, National Weather Service
- Department of the Interior
 - Bonneville Power Administration
 - Bureau of Land Management
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
 - National Park Service
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 - Corps of Army Engineers

PUBLIC UTILITIES

- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES

- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS

- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

- The Crag Rats, Hood River, Oregon

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